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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590	04/23/2004			EXAMINER
FOLEY & LARDNER			SCHLAIFER, JONATHAN D	
3000 K ST NW			ART UNIT	PAPER NUMBER
SUITE 500			2178	//
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DATE MAILED: 04/23/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/357,841	OTSUBO, MOTOHIDE
	<b>Examiner</b>	<b>Art Unit</b>
	Jonathan D. Schlaifer	2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 March 2004.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

Art Unit: 2178

## DETAILED ACTION

1. This action is responsive to communications: Amendment filed on 3/2/2004.
2. The objections to the drawings are withdrawn as necessitated by amendment. New drawings were received on 3/2/2004. These drawings are acceptable.
3. The current objections to the specification are withdrawn as necessitated by amendment.
4. Claims 1-18 are pending in the case. Claims 1 and 2 are independent claims. Claims 1, 2, 6, and 18 have been amended. There are no new claims.
5. The objections to claims 1, 6, and 18 are withdrawn as necessitated by amendment.
6. The rejection to claim 2 under 35 U.S.C. 112, second paragraph has been withdrawn as necessitated by amendment.

### *Specification*

7. The title of the invention contains a typo. The word “Structure” should be “Structured”.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1 and 17-18 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Catapult, Inc. (“Microsoft Word 97: Step by Step”, 1997) further in view of Jaakkola, et al. (“sgrep – search a file for a structured pattern”), hereinafter Jaakkola**

9. **Regarding independent claim 1**, Catapult, Inc., on pages 197-198 of the book, discloses Microsoft Word 97's capability to simultaneously acquire and edit multiple structured documents (Microsoft Word documents are inherently structured documents). This capability constitutes a method of editing a plurality of structured documents, comprising the step of acquiring a plurality of structured documents in a document edit system. However, Catapult, Inc. fails to disclose extracting a plurality of elements in each of said plurality of structured documents using an element edit statement which indicates element to be extracted, wherein the elements are extracted while the relationship of the elements extracted is maintained. However, on page 4 of the document, Jaakkola discloses that sgrep, a structured document search utility may process multiple documents, and on page 10, shows examples of the usage of sgrep which indicate that it can be used in a flexible manner that using an element edit statement which indicates element to be extracted, wherein the elements are extracted while the relationship of the elements extracted is maintained in order to search and filter material in documents in order to retrieve information in an easy and flexible manner. It would have been obvious to one of ordinary skill in the art at the time of the invention to use sgrep in combination with Microsoft Word in order to search and filter material in documents in order to retrieve information in an easy and flexible manner.

10. **Regarding dependent claim 17**, Catapult, Inc., on page 89, shows that the Find feature in Word is designed to respond to multiple user requests. It was notoriously well known at the time of the invention that users often needed to find and retrieve multiple requests to serve multiple search needs. It would have been obvious to one of ordinary skill in the

art at the time of the invention to allow for multiple requests, thereby acquiring another element edit statement into said document edit system, said another element edit statement being used to edit the elements which have been extracted to serve multiple search needs.

11. **Regarding dependent claim 18**, it was notoriously well known at the time of the invention that a word processor's search feature would initialize variables relevant to follow-up searches in order to allow the word processor to operate. It would have been obvious to one of ordinary skill in the art at the time of the invention to follow common word processing practice and arrive at a method wherein said another element edit statement comprises another set of document editing instructions which are used for initializing a plurality of variables providing for editing the elements extracted, pre-editing, post-editing, and arranging the elements extracted in order to allow the word processor to operate.
12. **Claims 2-3 and 5-6 and 11-12 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Catapult, Inc. further in view of Microsoft Corporation ("User's Guide: Microsoft Word", Version 6.0, 1993-1994) further in view of Jaakkola further in view of Hahn ("Harley Hahn's Student Guide to Unix", WCB/McGraw-Hill, 1996)**
13. **Regarding independent claim 2**, Catapult, Inc., on pages 197-198 of the book, discloses Microsoft Word 97's capability to simultaneously acquire and edit multiple structured documents (Microsoft Word documents are inherently structured documents). This capability constitutes a method of editing a plurality of structured documents, comprising

the step of acquiring a plurality of structured documents in a document edit system. Catapult, Inc. further discloses acquiring an element edit statement into said document edit system, said element statement comprising a plurality of edit instructions for searching at least one element in the documents on page 89 in the description of how a search string is entered in the find and replace box. Catapult, Inc. fails to disclose defining an element search portion, said element search portion containing a plurality of documents in the documents and implementing match operations between an element defined in said element edit statement and each of the elements in said element search portion, and ascertaining an element which matches the element defined in said element edit statement, the matched element being extracted if the matched element is indicated as being extracted, the extracted element being stored in an edit result storage, and said match operations being repeated until completing all the edit instructions in the element edit statement. However, Microsoft Corporation at the bottom of page 59 discloses that the user may select the portion of a document to search in order to control the search. It would have been obvious to one of ordinary skill in the art at the time of the invention to define an element search portion in the documents (since multiple documents are being considered) in the manner of Microsoft Corporation in order to control the search. Also, Jaakkola discloses on page 1 that sgrep inherently involves implementing match operations between an element defined in said element edit statement and each of the elements in said element search portion, and ascertaining an element which matches the element defined in said element edit statement, the matched element being extracted if the matched element is indicated as being extracted and repeating said match operations

until completing all the edit instructions in the element edit statement (it performs a search function based upon an element edit statement) in order to effectively search and filter files. It would have been obvious to one of ordinary skill in the art at the time of the invention to perform a search in the manner of Jaakkola in order to effectively search and filter files. Hahn reveals on pages 316-317 that it is common practice in computation to redirect useful information into a file for further processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the extracted element be stored in an edit result storage after the teachings of Hahn.

14. **Regarding dependent claim 3**, Catapult, Inc., on pages 191-192, describes Microsoft Word's capability to edit multiple documents on a document-by-document basis.
15. **Regarding dependent claim 5**, Jaakkola on page 5 notes that a region expression may be delimited by parentheses, and this constitutes a method wherein said element edit statement contains a tag which is delimited using two selected characters, said tag being used to define an element which is an identified element in the element search portion of the document.
16. **Regarding dependent claim 6**, Jaakkola on page 5 indicates that basic expressions, which are the main constituents of searches, may contain phrases. Hence, this constitutes a method wherein said element edit statement contains a character pattern consisting of normal text characters in sequence.
17. **Regarding dependent claim 11**, Jaakkola reveals from the way expressions are built up on page 5 that successive regions are recognized successively. Hence, sgrep as portrayed by Jaakkola would behave as if it had a hierarchy connector defined by inserting no

character between first and second element-defining names, said hierarchy connector being used to determine if an element defined by said first element-defining name involves an element defined by said second element-defining name when used upon a structured document.

18. **Regarding dependent claim 12**, Jaakkola discloses on page 5 that in sgrep, the element edit statement contains parentheses involving a plurality of element-defining names that are preferentially processed.
19. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Catapult, Inc. further in view of Microsoft Corporation further in view of Jaakkola further in view of Hahn further in view of Hikida (USPN 5,737,737—filing date 5/19/1993)**
20. **Regarding multiply dependent claim 4**, Catapult, Inc., Microsoft Corporation, Jaakkola, and Hahn fail to disclose a method wherein the elements stored in said edit result storage are further edited before being retrieved from said document edit system. However, Hikida, in col. 37, lines 8-17, discloses that edit processing is an option following a search in order to help process the results of the search. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Hikida about processing search results to develop a method wherein the elements stored in said edit result storage are further edited before being retrieved from said document edit system in order to help process the results of the search.
21. **Claims 7 and 9-10 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Catapult, Inc. further in view of Microsoft Corporation further in view of**

**Jaakkola further in view of Hahn further in view of Parry (USPN 6,077,085—filing date 5/19/1998)**

22. **Regarding dependent claim 7**, Jaakkola discloses, on page 10, a syntax for a wild card tag which is two periods in sequence between identifying blocks delimited by two braces, which are two selected characters. This constitutes a method wherein said element edit statement contains a wild card tag delimited using two selected characters, said wild card tag being used to determine structured layers in the element search portion of the document. However, Catapult, Inc., Microsoft Corporation, Jaakkola and Hahn fail to disclose that the wild card tag is a single character. However, Parry in col. 7, lines 43-55 shows the use of the single character '\*' as a wild card in order to compactly represent a wild card in a search string. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Parry's teachings about the use of the asterisk to represent a wildcard with one character in order to compactly represent a wild card in a search string.

23. **Regarding dependent claim 9**, Jaakkola discloses on page 10 the use of "containing" as an extraction indicator accompanying a character sequence, said extraction indicator being used to extract an element from the element search portion of the document if said character sequence matches the element in the element search portion. However, Catapult, Inc., Microsoft Corporation, Jaakkola and Hahn fail to disclose that the wild card tag is a single character. However, Parry in col. 7, lines 43-55 shows the use of the single character '\*' as a wild card in order to compactly represent a search operator in a search string. It would have been obvious to one of ordinary skill in the art at the time of

the invention to use Parry's teachings about compact representation of search operators to represent "containing" with an arbitrary character in order to compactly represent a search operator in a search string.

**24. Regarding dependent claim 10,** Jaakkola discloses on page 10 the use of ".." as a sequence connector, said sequence connector accompanying two element-defining names at both sides of said sequence connector, said sequence connector specifying, in the element search portion, two elements positioned in the same order of said two element-defining names. However, Catapult, Inc., Microsoft Corporation, Jaakkola and Hahn fail to disclose that the wild card tag is a single character. However, Parry in col. 7, lines 43-55 shows the use of the single character '\*' as a wild card in order to compactly represent an operator in a search string. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Parry's teachings about compact representation of search operators to represent ".." with an arbitrary character in order to compactly represent an operator in a search string.

**25. Claims 8 and 13-16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Catapult, Inc. further in view of Microsoft Corporation further in view of Jaakkola further in view of Hahn further in view of Costales ("C from A to Z", 1985)**

**26. Regarding dependent claim 8,** Jaakkola discloses on page 10 that one may use "not containing" as part of a search string as a negation indicator that accompanies an element-defining name, said negation indicator being used to define an element wherein an element match is not established with a character sequence immediately following said

negation indication ("not containing indicates what to avoid). However, Catapult, Inc., Microsoft Corporation, Jaakkola and Hahn fail to disclose that the negation indicator is a single character. However, Costales, on page 41, indicates that the minus sign (-) is used in the C language to indicate negation compactly. It would have been obvious to one of ordinary skill in the art at the time of the invention to denote negation compactly in the manner of Costales and use a minus sign as a single character for negation.

27. **Regarding dependent claim 13,** Jaakkola discloses on page 8 that one may use the ' \_\_ ' linking keyword in sgrep to provide functionality such that by using the 'in' keyword, it will work as for an AND connector accompanying first and second element-defining names which are provided so as to sandwich said AND connector, said two element-defining names being used to determine if the element, which forms part of the element search portion and is defined by said first element-defining name, either follows or precedes the element which is defined by said second element-defining name, because ' \_\_ ' establishes a joint region based on the two elements. Catapult, Inc., Microsoft Corporation, Jaakkola and Hahn fail to disclose that the AND connector is a single character. However, Costales, on page 236, indicates that the ampersand (&) is used in the C language to indicate bitwise AND compactly. It would have been obvious to one of ordinary skill in the art at the time of the invention to denote the AND operator compactly in the manner of Costales and use an ampersand as a single character for AND.

28. **Regarding dependent claim 14,** Jaakkola discloses on page 8 that one may use the ' \_\_ ' keyword in sgrep to provide functionality such that by using the ' \_\_ ' keyword, it will

work as for an AND connector wherein, if either of said first or second element-defining names sandwiching said AND connector specifies the corresponding element in the document, a match is established therebetween and the corresponding element is extracted and stored in said edit result storage.

29. **Regarding dependent claim 15,** Jaakkola discloses on page 7 that one may use the ‘equal’ keyword to retrieve only matches where both regions are matched to, which inherently involves a method wherein if a match is established in connection with only one of said first and second element-defining names, the element already stored in said edit result storage is deleted therefrom.
30. **Regarding dependent claim 16,** Jaakkola discloses on page 7 that one may use the ‘or’ keyword to provide functionality such that wherein said element edit statement contains an OR connector defined using a selected character and accompanying first and second element-defining names which are provided in a manner to sandwich said OR connector, said two element-defining names being used to determine if the element, which forms part of the element search portion and is specified by either of said first and second element-defining names, is present in the element search portion of the document, because the keyword’s function is to provide disjunctive searching. However, Catapult, Inc., Microsoft Corporation, Jaakkola and Hahn fail to disclose that the OR connector is a single character. However, Costales, on page 237, indicates that the vertical bar (|) is used in the C language to indicate bitwise OR compactly. It would have been obvious to one of ordinary skill in the art at the time of the invention to denote the OR operator compactly in the manner of Costales and use a vertical bar as a single character for OR.

***Response to Amendment***

31. Applicant's arguments filed 3/2/2004 have been fully considered but they are not persuasive.
32. The Applicant cites that Microsoft Word creates form letters or merged documents that are not structured documents. The Examiner replies that in that the form letters have a defined structure of fields and use tags to denote elements, so they may be considered structured documents. Hence, Catapult is completely relevant to the present invention claimed in claim 1.
33. The Applicant states that "sgrep" is inadequate for manipulating element edit statements instead of region expressions; the Examiner maintains that element edit statements and region expressions are functionally equivalent, and hence this traversal is without force. Hence, Jaakkola retains the ability to be relevant to a *prima facia* case of obviousness and be combined to provide a valid rejection for claim 1. These arguments also apply insofar as they are relevant to claim 2.
34. The Applicant asserts that Jaakkola fails to specifically teach or suggest usage of "element", "element edit statement", and "matching of elements". However, Applicant admits that Jaakkola's invention operates by "filtering text streams" and Jaakkola makes it clear that "element", "element edit statement", and "matching of elements" are incorporated into this functionality.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5,548,508 (filing date 10/28/1994)—Nagami

USPN 5,587,902 (filing date 5/26/1993)—Kugimiya

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan D. Schlaifer whose telephone number is 703-305-9777. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS



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PRIMARY EXAMINER